

F1G. 2

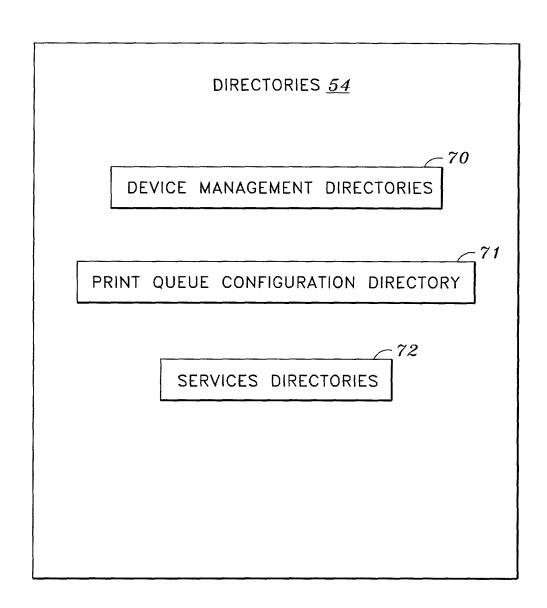


FIG. 3

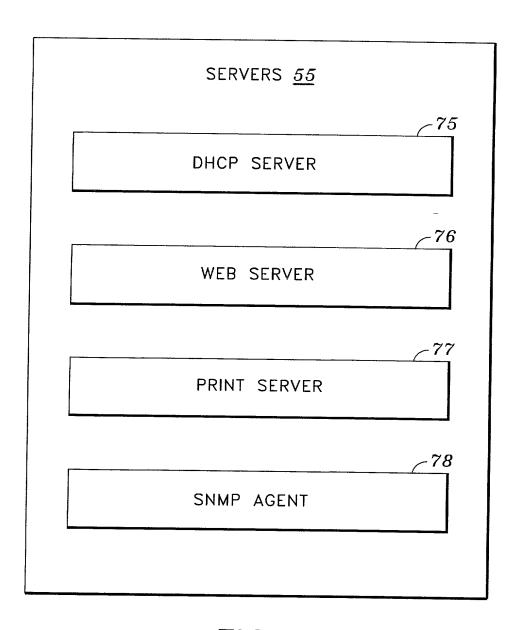


FIG. 4

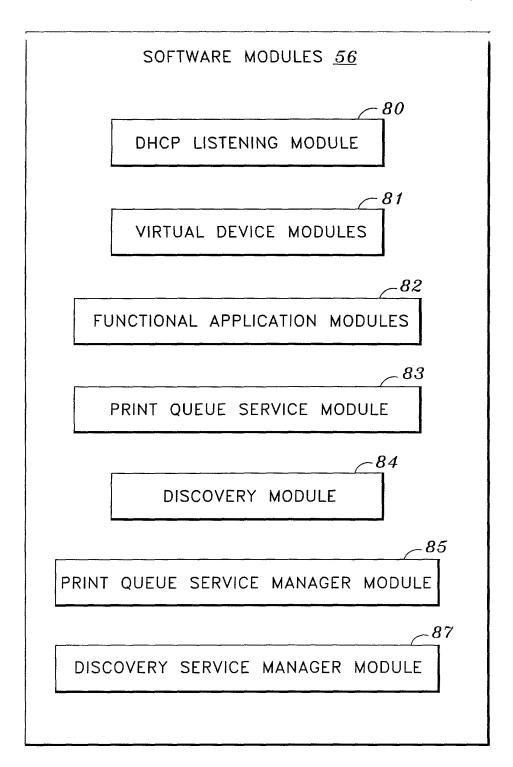


FIG.5

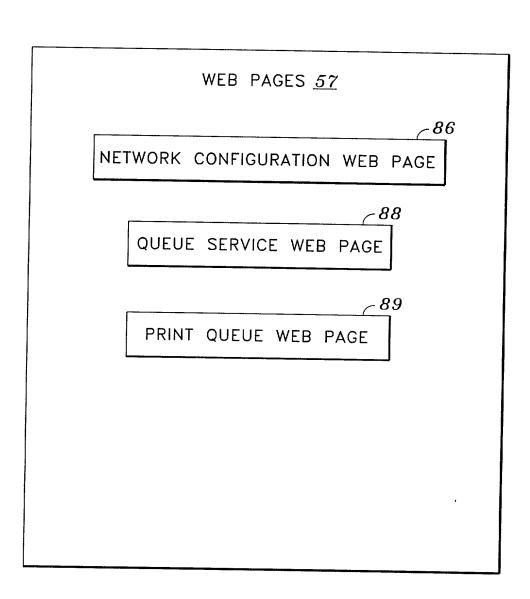


FIG. 6

DEVICE MANAGEMENT DIRECTORY 70

	1					<del> </del>		
NETWORK CONFIGURATION INFORMATION 94	Domain Name, e c.			1	ļ ļ	1	I	1
IP ADDRESS	129.65.220.8							
PRINT DEVICE TYPE 92	Canon Laser	Ī	l I	l		l	1	1
MAC ADDRESS 91	00:00:85:69:0A:B3	1			-		!	
ENTRY 90	Entry 1			-			1	Entry N

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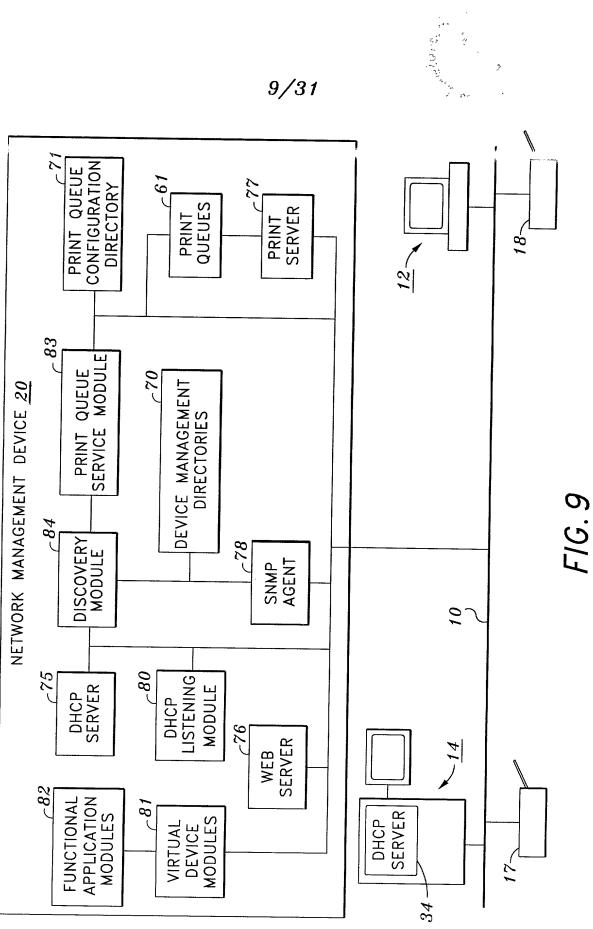
F1G. 7

PRINT QUEUE CONFIGURATION DIRECTORY 71

				<sub>1</sub>			<del></del>	
SERVE 105	Main /							
PRINTING CAPABILITIES 103	<u>U</u>			1			!	-
PRINT QUEUE NAME 102	ser			1				
MAC ADDRESS	00:00:85:69:0A:B3							
IP ADDRESS 100	Entry 1 129.65.220.8			Taran	enter		1	
	Entry 1	_		-			1	ENTRY N

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F16.8



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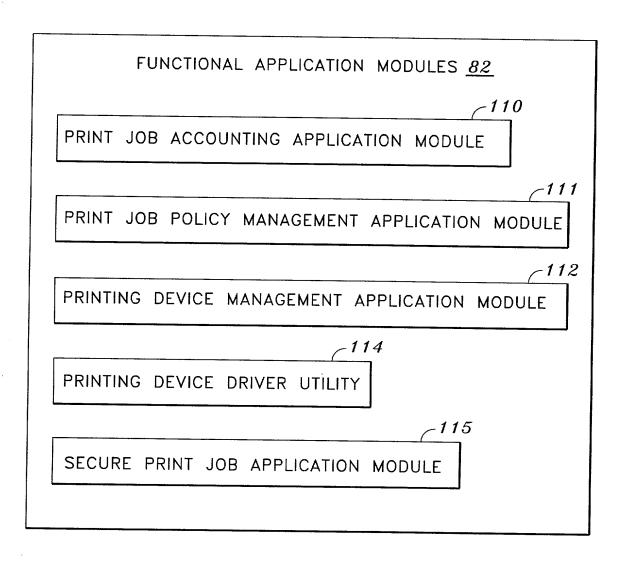


FIG. 10

## SERVICES DIRECTORIES 72

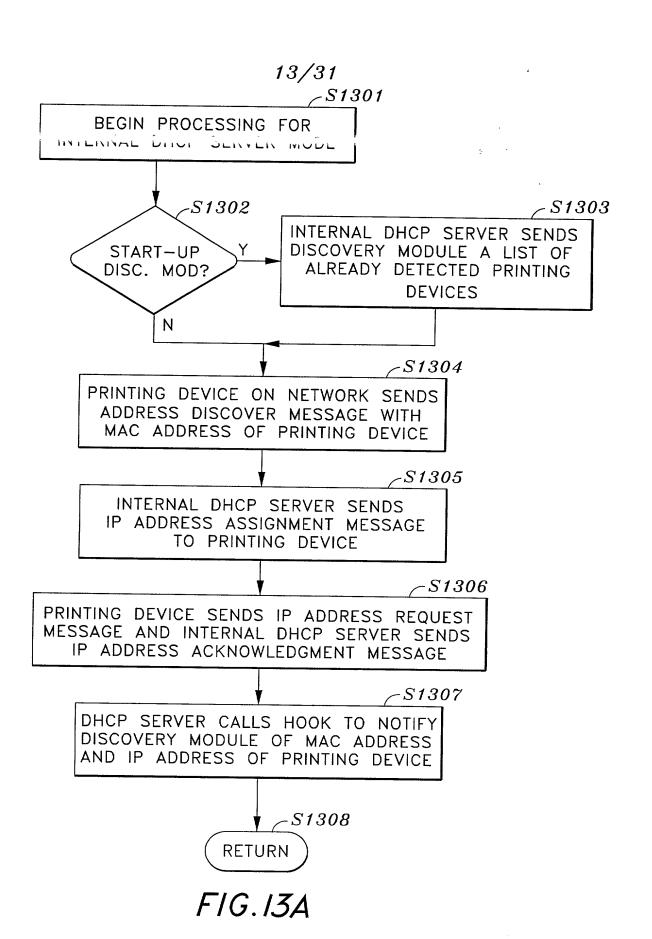
			-120
	LOCAL SERVICES DIRECTORY		
SUBNET I	22124 ID SERVICE	125 NMD ID	5
1	DISCOVERY	NMD 1	
1	PRINT QUEUE	NMD 2	

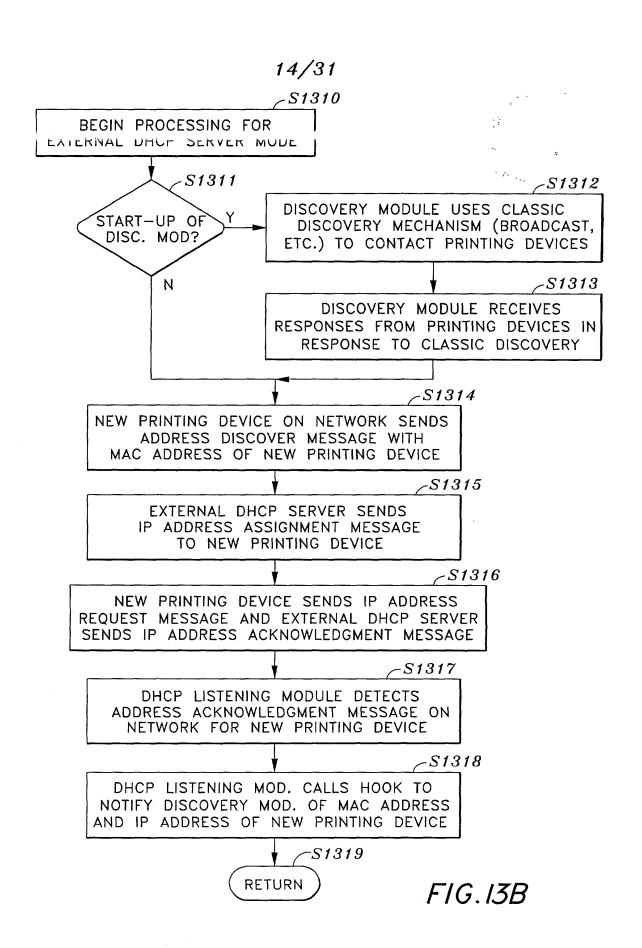
GLO	BAL SERVICES DIRECTOR	Y
SUBNET ID		_125 NMD ID
1	PRINT QUEUE	NMD 1
1	DISCOV. SERV. MGR.	NMD 3
1	GLOBAL INFO SERV.	NMD 1

FIG. 11

GLO	<u>121</u>	
_122	_124	125ے
SUBNET ID	SERVICE	NMD ID
1	MASTER	NMD 1
1	DISC. SERV. MGR.	NMD 3
1	GLOBAL INFO SERV.	NMD 1
1	PRINT QU. SERV. MGR.	NMD 3
•		
•		
•		

FIG. 12





~ S1322

-S1323

-S1324

S1325

DISCOVERY MODULE SENDS SNMP INFORMATION REQUEST MESSAGE TO DETECTED PRINTING DEVICE BASED ON ASSIGNED IP ADDRESS OF DETECTED PRINTING DEVICE

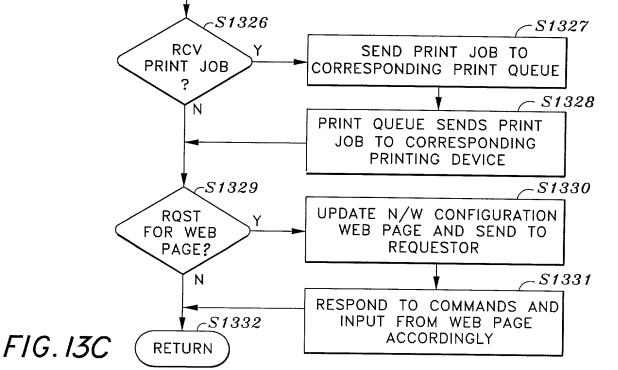
DISCOVERY MODULE RECEIVES SNMP INFORMATION RESPONSE MESSAGE FROM DETECTED PRINTING DEVICE

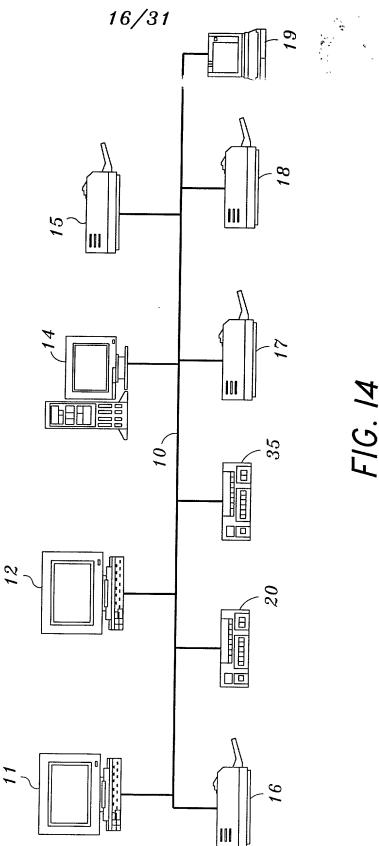
DISCOVERY MODULE CREATES ENTRY FOR DETECTED PRINTING DEVICE IN DEVICE MANAGEMENT DIRECTORY BASED ON IP ADDRESS, MAC ADDRESS, AND RECEIVED INFORMATION OF PRINTING DEVICE

INITIATE NECESSARY VDMs AND FAMS IN SUPPORT OF DETECTED PRINTING DEVICE

NOTIFY PRINT QUEUE SERVICE MODULE TO CREATE CORRESPONDING PRINT QUEUE FOR DETECTED PRINTING DEVICE

PUBLISH NETWORK MANAGEMENT DEVICE TO NETWORK AS PRINT SERVER AND PUBLISH PRINT QUEUES TO N/W





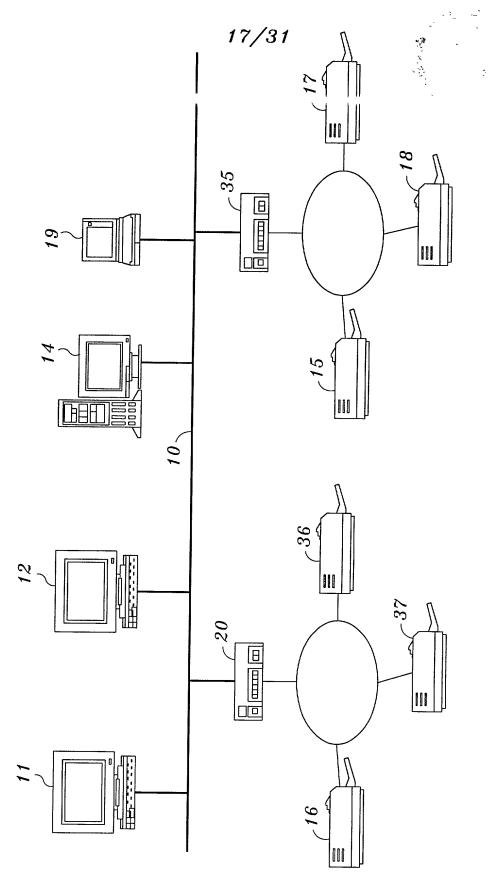
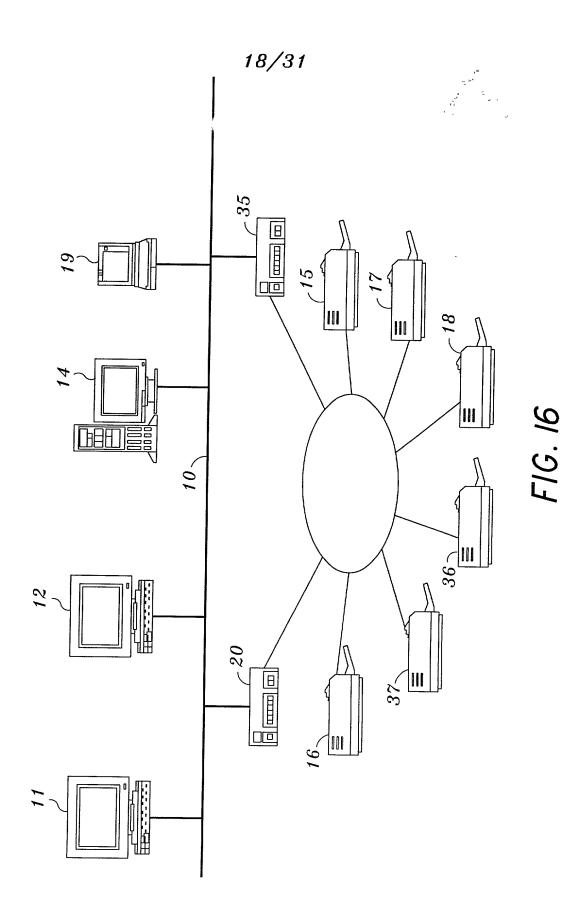
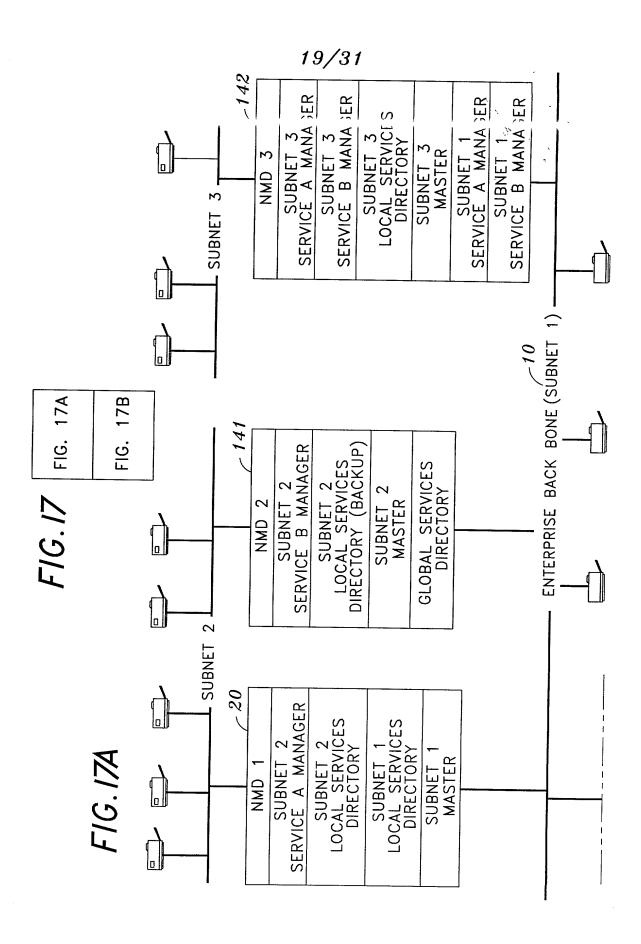
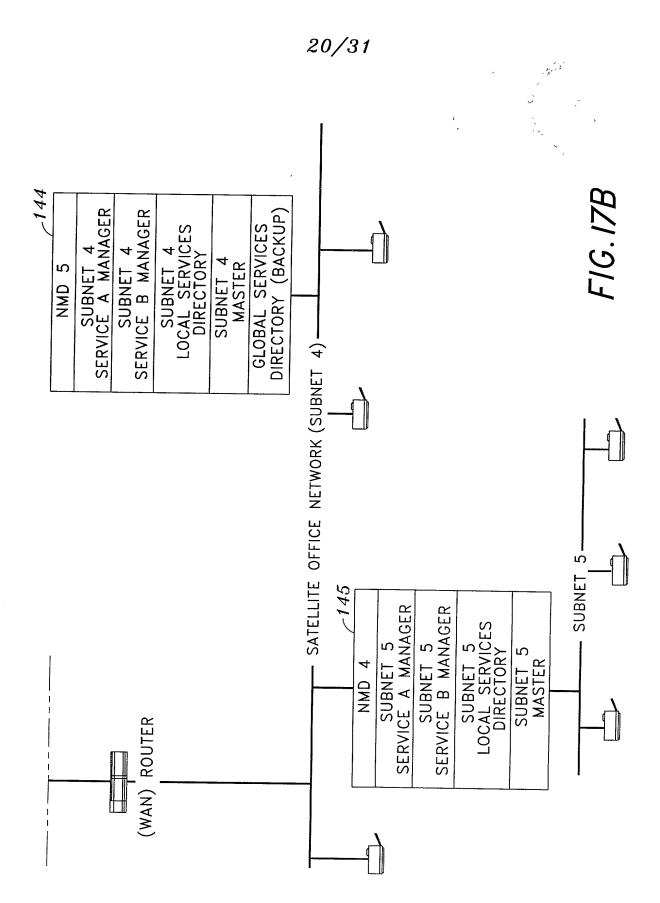


FIG. 15







*F/G. 18* | FIG. 18A

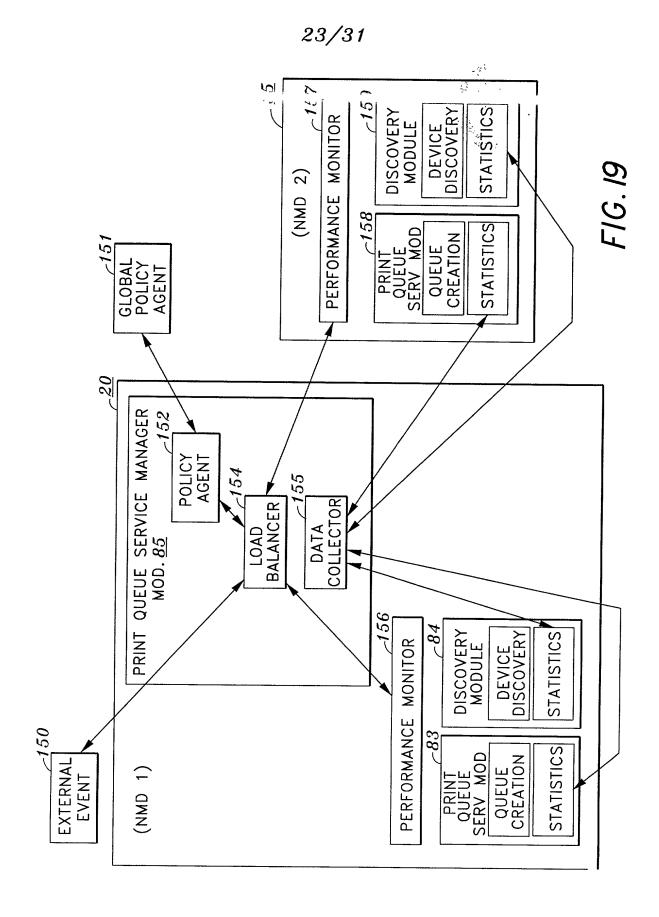
FIG. 18B

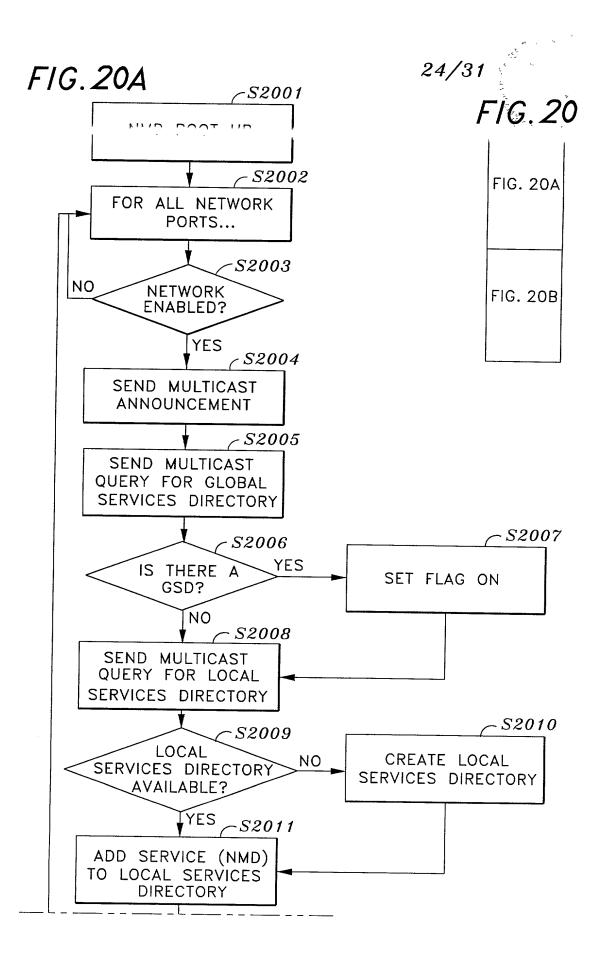
					, (	N				
	STATE	SNINNIA TON	ONINNII LON	RUNNING	CNINI		ONINAL FOR	RUNNING	UNINUIA LON	NOT RUNNING/BACKUP
NMD 1	COMPONENT	PRINTER QUEUE SERVICE	DISCOVERY SERVICE	LOCAL SERVICES DIRECTORY	MASTER	PRINTER QUEUE SERVICE	DISCOVERY SFRVICE	LOCAL SERVICES DIRECTORY	MASTER	GLOBAL SERVICES DIRECTORY
	SUBNET		-	-	_	2	2	2	2	

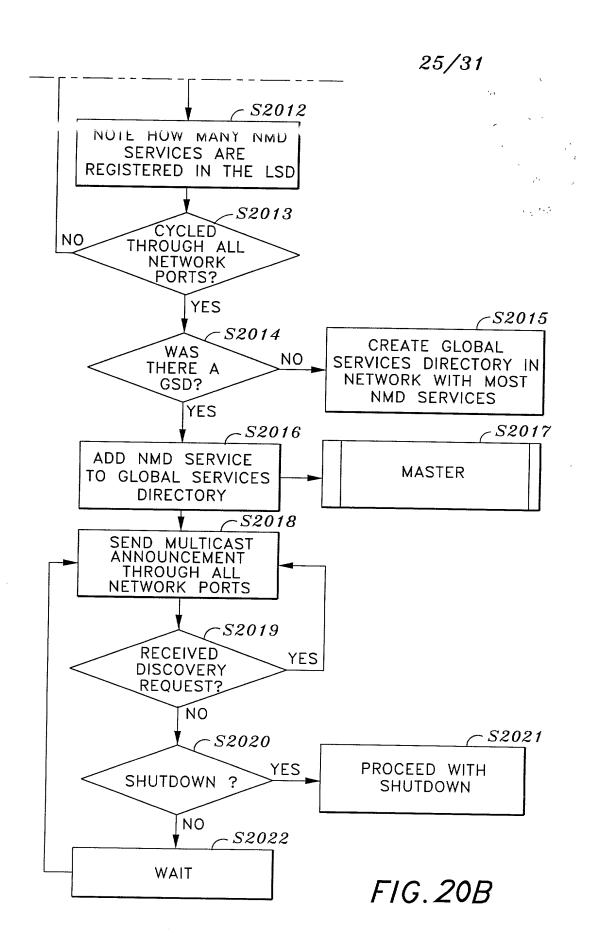
_						<u></u>				
	STATE	NINNING TON	CNINNIA	NOT RUNNING /BACKIIP	ONINNIA TON	CNINNIA LON		BACKIP	CNINNIA	CZIZZ
NMD 2	COMPONENT	PRINTER QUEUE SERVICE	DISCOVERY SERVICE	LOCAL SERVICES DIRECTORY	MASTER	PRINTER QUEUE SERVICE	DISCOVERY SFRVICE	LOCAL SERVICES DIRECTORY	MASTER	GLOBAL SERVICES DIRECTORY
	SUBNET	-				2	2	2	2	

	SUBNET	
	001	
	7	

2, 2									7,5					471												
STATE	RUNNING	NOT RUNNING/BACKUP	NOT RUNNING	RUNNING	RUNNING	RUNNING	RUNNING	NOT RUNNING/BACKUP		F + + ()	SIAIE	SCINCINC CONTROL OF THE PROPERTY OF THE PROPER	RUNNING	RUNNING	BACKUP		STATE	NOT RUNNING	NOT RUNNING	NOT RUNNING/BACKUP	NOT RUNNING	RUNNING	SUNNUM	RUNNING	RUNNING	NOT RUNNING/BACKUP
COMPONENT PRINTED OFFICE SERVICE	DISCOVERY SERVICE	LOCAL SERVICES DIRECTORY	MASTER	PRINTER QUEUE SERVICE	~	LOCAL SERVICES DIRECTORY	MASTER	GLOBAL SERVICES DIRECTORY	Z C X Z	THENDON	PRINTER QUEUE SERVICE	DISCOVERY SERVICE	LOCAL SERVICES DIRECTORY	MASTER	GLOBAL SERVICES DIRECTORY	NMD 5	COMPONENT	PRINTER QUEUE SERVICE	$\alpha$	LOCAL SERVICES DIRECTORY	1	PRINTER QUEUE SERVICE	DISCOVERY SERVICE	LOCAL SERVICES DIRECTORY	MASTER	GLOBAL SERVICES DIRECTORY
SUBNET 1		-	•	3	3	3	3			SIIBNET	4	4	4	4			SUBNET	4	4	4	4	5	2	5	2	







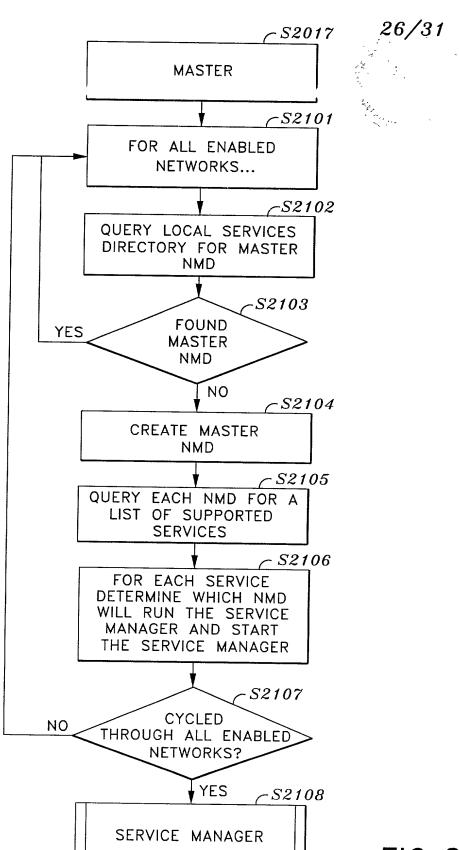


FIG. 21

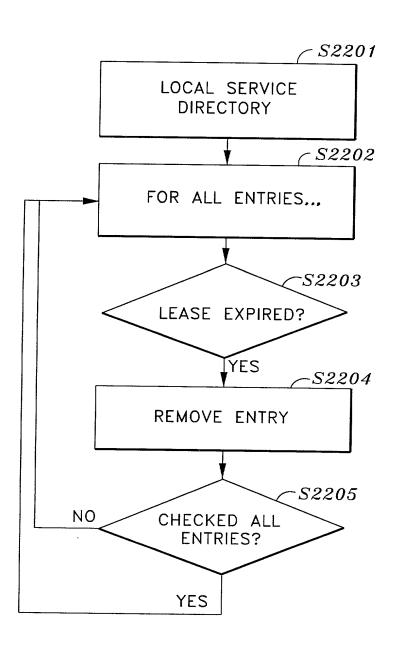
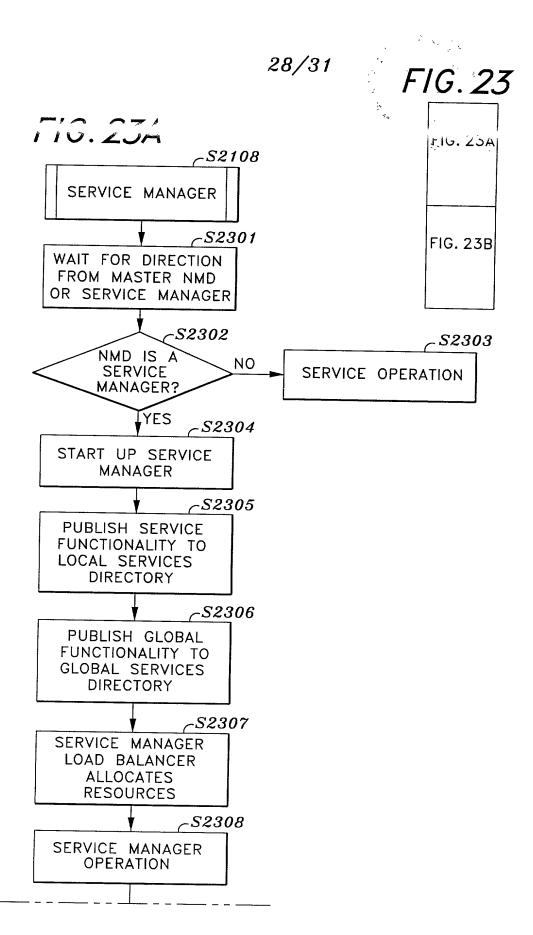
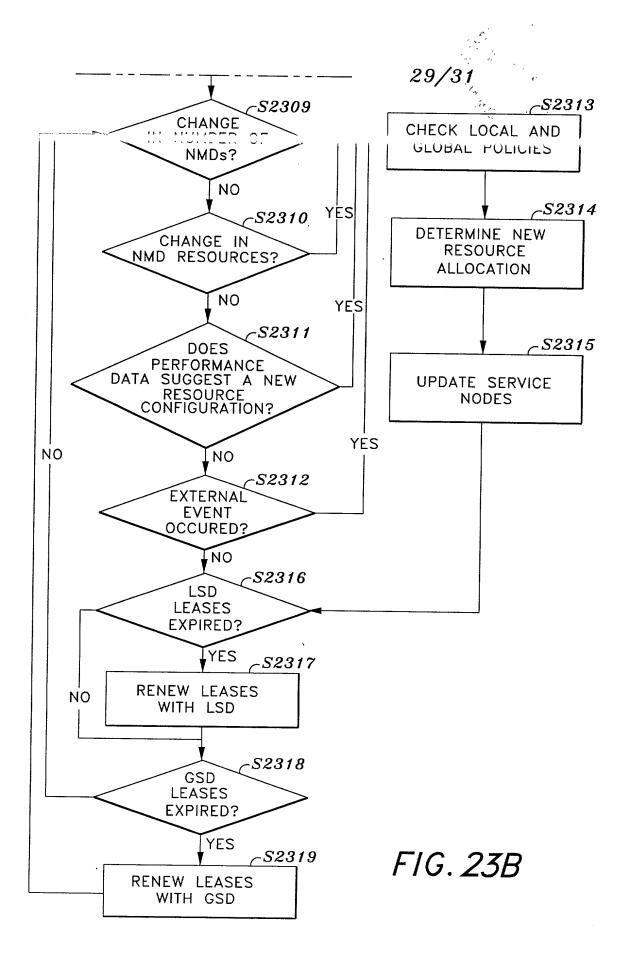
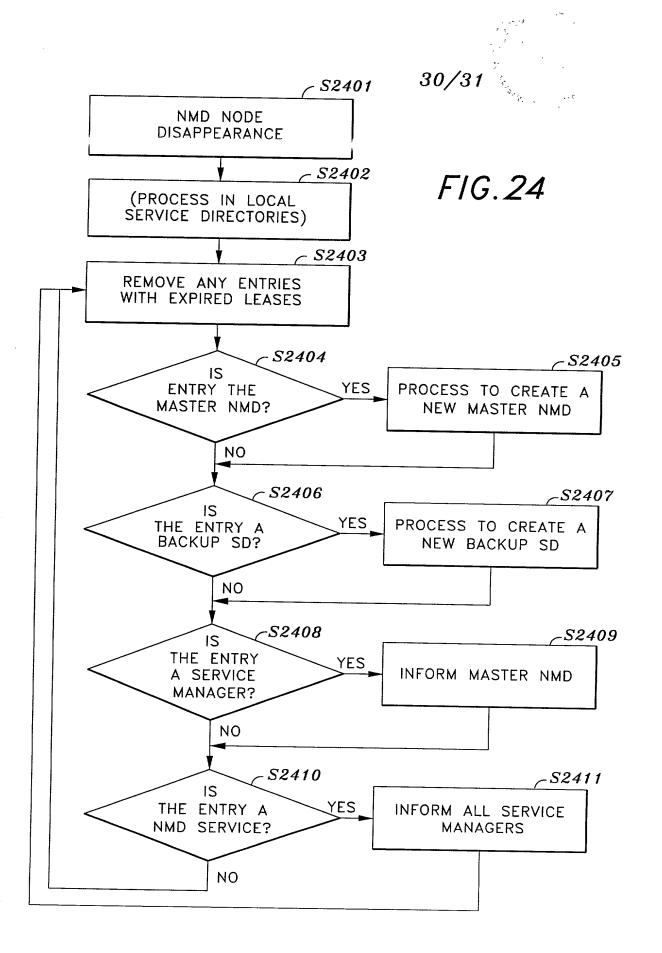


FIG. 22







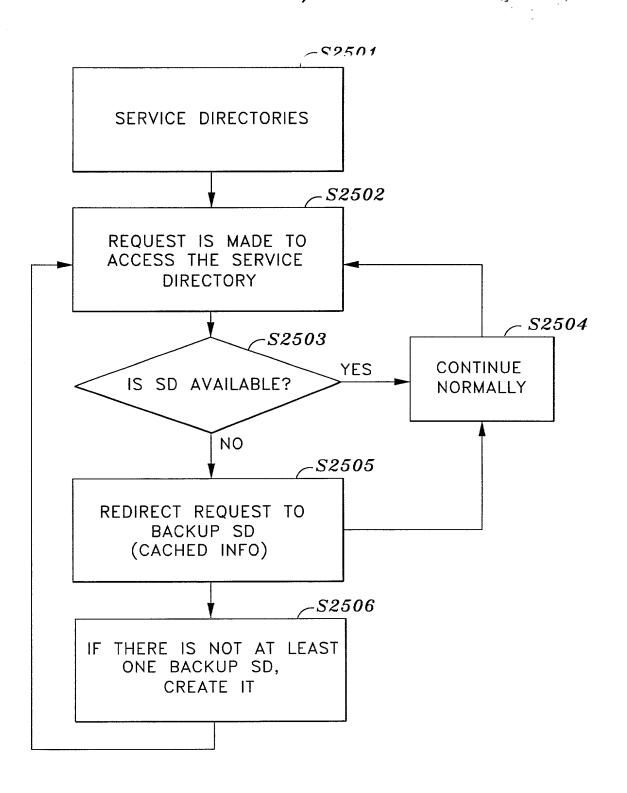


FIG. 25